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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,939	08/18/2005	Hartwin Weber	47192/311459	8392
23370	7590	10/24/2007		
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			EXAMINER ZHU, WEIPING	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 10/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,939	Applicant(s) WEBER ET AL.	
	Examiner Weiping Zhu	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/4/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/27/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

The application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.4999, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1-18, drawn to a golf club head made of a maraging steel.
- II. Claims 19 and 20, drawn to a process for manufacturing the maraging steel for the golf club head.

The inventions listed as I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature in all groups is the maraging steel. This element cannot be a special technical feature under PCT Rules 13.2 because the element is shown in the prior art. WO 01/53556 A1 discloses a maraging steel (abstract), which is substantially identical to the claimed maraging steel. Inventions I-II lack the same or corresponding special technical features. Therefore unity of invention is lacking and restriction is appropriate.

During a telephone conversation with Mr. Dean W. Russell on August 21, 2007 a provisional election was made with traverse to prosecute the invention of I, claims 1-18. Affirmation of this election must be made by the applicant in replying to this Office

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action. Claims 19 and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should the applicant traverse on the ground that the inventions are not patentably distinct, the applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103 (a) of the other invention.

The applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Examiner's Notes

It is noted that the instant claims 2 and 5 recite the word "can". Therefore, the instant claims 2 and 5 do not positively recite the replacement of Cr by Mo and/or W (claim 2) or the additional element(s) of Mn, Nb or Si (claim 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/53556 A1 (Weber et al. US 2003/0091458 A1) in view of Ezawa et al. (US 2002/0045490 A1).

Because WO ('556 A1) is in German, its corresponding US publication Weber et al. ('458 A1) is relied upon to establish the rejection ground.

With respect to claims 1 and 9-18, Weber et al. (458 A1) discloses a maraging steel with a martensite temperature $M_s \geq 130^\circ\text{C}$, a ferrite content $C_{\text{ferrite}} < 3\%$, wherein the maraging steel essentially consists of by weight 6.0-9.0% of nickel, 11.0-15.0% of chromium, 0.1-0.3% of titanium, 0.2-0.3% of beryllium and the rest being iron together with unavoidable impurities (abstract). Weber et al. (458 A1) further disclose a process to produce the maraging steel (paragraph [0029], page 2), which is substantially identical to the process of the instant invention. Weber et al. (458 A1) do not specify the mechanical properties as claimed in the instant claims 1 and 9-18. However, it has been

well held where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977), MPEP 2112.01 [R-3] I. In the instant case, the claimed and Weber et al. (458 A1)'s maraging steel are identical or substantially identical in composition and structure and are produced by identical or substantially identical processes, therefore the maraging steel of Weber et al. (458 A1) anticipates the claimed maraging steel. The same tensile strength, the same yield strength, the same alternating flexure strength, the same hardness and the same maximal storage energy would be expected in the maraging steel of Weber et al. (458 A1) as in the claimed maraging steel.

Weber et al. (458 A1) do not disclose a golf club head that is at least partly made of the maraging steel as claimed. Ezawa et al. ('490 A1) disclose a golf club head made at least partially of a maraging steel (paragraph [0010], page 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the maraging steel of Ezawa et al. ('490 A1) with the maraging steel of Weber et al. (458 A1) with expected success, because the maraging steels are functionally equivalent in terms of being used to make golf club heads as disclosed by Ezawa et al. ('490 A1) (paragraph [0010], page 1). See MPEP 2144.06

With respect to claim 2, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose that the golf club head wherein up to 35% of the chromium content can be replaced by molybdenum and/or tungsten (paragraph [0019], page 2).

With respect to claim 3, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose that the golf club head wherein the maraging steel essentially consists of by weight 7.8% of nickel, 13.0% of chromium, 0.2% of titanium, 0.25% of beryllium, 1.0% of molybdenum and the rest being iron together with unavoidable impurities (paragraph [0035], page 3).

With respect to claim 4, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose that the golf club head wherein the maraging steel contains by weight up to 0.1% cerium or cerium misch metal (paragraph [0023], page 2).

With respect to claim 5, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose that the golf club head wherein the maraging steel contains at least one of the elements of manganese, niobium or silicon in individual proportion of less than 0.5% by weight (paragraph [0020], page 2).

With respect to claim 6, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose that the golf club head wherein the maraging steel contains at least one of the elements of C, N, S, P, B, H, or O in individual proportion of less than 0.1% by weight (paragraph [0022], page 2).

With respect to claims 7 and 8, Weber et al. (458 A1) in view of Ezawa et al. ('490 A1) disclose the identical formulas for the martensite temperature M_s and the ferrite content C_{ferrite} respectively as claimed (paragraphs [0024] and [0025], page 2).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims 1-9 of Weber et al. (458 A1) in view of Ezawa et al. ('490 A1). Claims 1-9 of Weber et al. (458 A1)

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disclose a maraging steel, which is the same or obvious from the claimed maraging steel of the instant application.

Weber et al. (458 A1) do not disclose a golf club head that is at least partly made of the maraging steel as claimed in the instant claims 1-18. Ezawa et al. ('490 A1) is further applied to the claimed limitations in the instant claims 1-18 for the same reasons as stated in the paragraph 2 above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

4. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZ

9/4/2007


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